



**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

2006.

Applicants: Flora Tak Tak Ng et al.

Serial No.: 10/582,333

Filed (I.A.): December 10, 2004

Title: COMPOSITE CATALYST FOR

THE SELECTIVE

OLIGOMERIZATION OF LOWER ALKENES AND THE PRODUCTION OF HIGH OCTANE PRODUCTS

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

Attorney Docket No.: 28870/38753

I héreby certify that this paper is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450, on November 20,

Sandio H. Patel (Reg. No. 43,848)

Attorney for Applicants

## INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 CFR §§ 1.56 and 1.97(b)(3), submitted herewith for consideration by the examiner are copies of the non-U.S. patent publications identified on the accompanying PTO/SB/08, which may be considered material to the examination of the above-identified patent application. It is respectfully requested that the information be expressly considered during the prosecution of the application, and that the identified documents be made of record therein and appear among those cited on the cover page of any patent issuing therefrom.

This information disclosure statement is being submitted before the mailing date of a first office action on the merits as far as known to the undersigned. Accordingly no certification or fee is due

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An early and favorable action on the merits is respectfully requested.

Respectfully submitted,

MARSHALL, GERSTEIN & BORUN LLP

November 20, 2006

Sandio H. Patel (Reg. No. 43,848) Attorneys for Applicants

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PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

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## INFORMATION DISTALOS STATEMENT BY APPLICANT

(Use as many sheets as necessary)

12 Sheet 1

Complete if Known		
Application Number	10/582,333	
Filing Date	December 10, 2004	
First Named Inventor	Flora Tak Tak Ng	
Art Unit		-
Examiner Name		
Attorney Docket Number	28870/38753	

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. 1	Document Number  Number-Kind code <sup>2 (if known)</sup>	Publication Date MM-DD-YYY	Name of Patentee or Applicant of Cited Document	Page, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
·	A1	US-1,400,849		Backhaus	· · · · · · · · · · · · · · · · · · ·
	A2	US-4,194,964	<del> </del>		
	A3	US-4,215,011	09-29-1980	Smith, Jr.	
	A4	US-4,232,177	11-04-1980	Smith	
	A5	US-4,250,052	02-10-1981	Smith, Jr.	
	A6	US-4,302,356	11-24-1981	Smith, Jr.	
	A7	US-4,439,350	03-27-1984	Jones, Jr.	·
	A8	US-4,443,559	04-17-1984	Smith. Jr.	
	A9	US-4,476,341		Mathys, et al	
<del></del> ,,	A10	US-4,935,577		Huss & Kennedy	
·-	A11	US-5,003,124	05-26-1991	Smith Jr., et al.	
<del></del>	A12	US-5,057,468	10-15-1991	Adams J.	
-	A13	US-5,118,900	06-02-1992	Drake	
	A14	US-5,189,001	02-23-1993	Johnson	
•	A15	US-5,235,102	08-10-1993	Palmer, et al.	Col. 2, in 9-67; col 3 in 35-col 4, in 15; col 5, in 2-11
	A16	US-5,244,929	09-14-1993	Gottlieb, et al.	
	A17	US-5,254,783	10-19-1993	Saleh et al	
	A18	US-5.262,012	11-16-1993	Smith, Jr.	
	A19	US-5,266,546		Hearn	
	A20	US-5,348,710	09-20-1994	Johnson et al.	
	A21	US-5,417,938		Shelden	·
	A22	US-5,431,890		Crossland, et al.	
	A23	US-5,457,268	10-10-1995	Greene, et al.	Col. 3, line 35 – Col. 4, Line 19
	A24	US-5,510,555	04-23-1996	Brunelli et al	
	A25	US-5,622,997	04-22-1997	Tennison et al	
	A26	US-5,730,843	03-24-1998	Groten et al	
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	A30	US-6,117,812	09-12-2000	Gao et al	
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Examiner		Date	1
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds codes of USPTO patent Documents at <a href="https://www.upsto.gov">www.upsto.gov</a> or MPEP 901.04 ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a checkmark here if English language Translation is attached.

Translation is attached.
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Complete if Known 10/582,333 Application Number Filing Date December 10, 2004 First Named Inventor Flora Tak Tak Ng Art Unit Examiner Name

28870/38753

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2

FOREIGN PATENT DOCUMENTS						
	Cite No. 1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
mueis	140.	Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)			Or Relevant Figures Appear	Т6
	B1	WO 02/092216	11-21-2002	Harkins, et al.		
	B2	GB 2 193 907 A	02-24-1988			

Attorney Docket Number

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages), volume-issue number(s), publisher, city and /or country where published.	T <sup>2</sup>
	C1	BELTRAME et al. (1994) Appl. Catal., A. general, 100, 39-48	
	C2	HEVELING et al, (2003) "Activity and selectivity of nickel-exchanged silica-alumina catalysts for the oligomerization of propene and 1-butene into distillate-range products"; Applied Catalysis A: General 248 p. 239-248	
	C3	KEIM et al, (1979) Mol. Catal., 6, 79	
	C4	KISTER & LARSON (1997)"Packed Distillation Tower Design", McGraw-Hill, Section 1.6, p.314-333	
	C5	MARCEL DEKKER INC. (ed. A Cybulski & J. Moulijn) (1998) "Structured Catalysts and Reactors"	
****	C6	RALPH F. STRIGLE, JR. (1987) "Random Packings and Packed Towers Design and Applications", Gulf Publishing Company, Houston Texas. P. 1-10	

Examiner	•	Date	
Signature		 Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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